



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

February 22, 2011

Ms. Jennifer Harris, P.E.
North Carolina Turnpike Authority
North Carolina Department of Transportation
5400 Glenwood Avenue, Suite 400
Raleigh, North Carolina 27612

SUBJECT: Gaston East-West Connector, I-85 to I-485 and NC 160, Gaston and Mecklenburg Counties, Final Environmental Impact Statement (FEIS);
TIP No.: U-3321; FHW-E40827-NC; CEQ No.: 20110011

Dear Ms. Harris:

The U.S. Environmental Protection Agency (EPA) Region 4 NEPA Program Office has reviewed the subject document for in accordance with Section 309 of the Clean Air Act and Section 102(C) of the National Environmental Policy Act (NEPA). The North Carolina Turnpike Authority (NCTA) and the Federal highway Administration (FHWA) are proposing to construct an approximate 22-mile, multi-lane, median-divided toll facility from I-85 west of Gastonia to I-485/NC 160 in Gaston and Mecklenburg Counties, North Carolina.

EPA provided detailed comments on the Draft Environmental Impact Statement (DEIS) on July 17, 2009. EPA rated the twelve (12) detailed study alternatives (DSAs) as "EO-2", Environmental Objections with additional information being requested in the final document. Subsequent to this letter, EPA staff has continued with work with the transportation agencies and other NEPA/Section 404 Merger process agencies on environmental issues, including air quality and transportation conformity, avoidance and minimization measures to jurisdictional waters of the U.S., and conceptual mitigation plans.

NCTA and FHWA provided responses to EPA's DEIS comment letter in Volume 2 of the FEIS, pages B1-39 to B1-63. NCTA and FHWA provided a Conceptual Mitigation Plan by reference to a project webpage and a general summary of the plan in the FEIS. EPA's detailed technical comments on the FEIS and the referenced reports are included in Attachment 'A' (See attached).

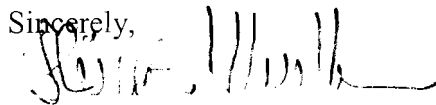
EPA recognizes that additional avoidance and minimization measures are currently being proposed by the transportation agencies. However, the initial preliminary designs were atypical for most new location, multi-lane, median-divided highway projects in North Carolina that resulted in much greater DEIS impacts to jurisdictional waters of the United States than other similarly scoped projects. Furthermore, EPA understands that the transportation agencies are now proposing to phase the project and

change the typical section. The section in western Gaston County from I-85 to US 321 or approximately half the project length will be initially constructed as a two-lane facility. Although many of the DEIS comments were addressed, EPA has remaining environmental concerns regarding direct impacts to jurisdictional streams and wetlands including 303(d) listed impaired waters, indirect and cumulative impacts to jurisdictional resources, potential Environmental Justice impacts to minority and low-income populations, long-term impacts from Mobile Source Air Toxics to nearby neighborhoods and communities, impacts to Voluntary Agricultural Districts, and impacts to terrestrial forests and wildlife habitat. EPA also maintains its concerns regarding the ability of the transportation agencies to provide reasonable and functionally equivalent mitigation for water resources impacts within the project study area.

To address these remaining issues, EPA recommends that the transportation agencies provide additional information to the review agencies and the public prior to the issuance of a Record of Decision (ROD). The supplemental information should further address the key issues in the attachment, including compensatory mitigation to direct impacts to jurisdictional streams and wetlands including 303(d) listed impaired waters, potential environmental enhancements to address indirect and cumulative impacts to jurisdictional resources, potential Environmental Justice impacts to minority and low-income populations and provide for a thorough analysis, and long-term impacts from Mobile Source Air Toxics to nearby neighborhoods and communities and a site-specific quantitative analysis. The supplemental information might also include specific project commitments concerning impacts to Voluntary Agricultural Districts and opportunities for safe wildlife passage to minimize fragmentation effects from the new multi-lane facility.

Should you have any questions concerning these comments or recommendations, please contact Mr. Christopher Militscher of my staff at 919-856-4206.

Sincerely,

A handwritten signature in black ink, appearing to read "Heinz J. Mueller", written over a horizontal line.

Heinz J. Mueller, Chief
NEPA Program Office

Cc: G. Conti, NCDOT
J. Sullivan, FHWA
S. McLendon, USACE
C. Sullins, NCDWC

Attachment A
FEIS Detailed Review Comments
Gaston East-West Connector Toll Facility
Mecklenburg and Gaston Counties
U-3321

General Comments to the FEIS

Chapter 1 of the FEIS includes the Draft EIS Summary and Updates, from pages 1-1 to 1-55. Based upon EPA's review, there is no mention of the petition signed by more than 7,000 citizens opposed to the project in this summary chapter. One of the main purposes of preparing an Environmental Impact Statement is to potentially address public controversy. Considering this petition and the hundreds of written responses following the public hearings, the NCTA and FHWA have chosen not to fully address the controversial issues identified during the NEPA process. The exclusion of specifically addressing this citizens' petition and other letters of opposition in the summary chapter of the FEIS appears to be inconsistent with other large scope toll projects currently being advanced by the transportation agencies (e.g., Raleigh Southern Outer Loop or Triangle Southeast Extension Connector and the "Red Alternative" and the Town of Garner).

Chapter 3, Section 3.3, includes more information regarding the comments from the general public. In addition to the approximate 7,000-person petition, NCTA and FHWA also received 275 signatures submitted by the Harrison family opposed to the project and 109 signatures submitted by Barbara Hart opposed to one segment of the project. Of the other 15 public comment letters received, 14 are opposed to the project and one is 'neutral'.

The generalized concerns expressed by the public and other agencies are included on pages 3-8 to 3-10. EPA does not believe that the generalized responses that NCTA provided to most of these key concerns from the public help to address the controversial issues associated with this proposed toll project.

As a general comment regarding the format of the DEIS and now the FEIS, EPA strongly encourages consistency. FHWA and NCDOT have produced dozens of EISs in the last ten years. Based upon the professional judgment of the principle NEPA reviewer, most all of them are very readable and information is easy to locate within the standard format specified in the CEQ regulations. NCTA and FHWA have developed their specific format that is less readable and more difficult to find information. For example, under Farmland impacts Section 1.3.2.3, the discussion does not specifically identify what the direct impacts to agricultural lands are from the Preferred Alternative, DSA 9. Furthermore, the comments concerning land use plans: "...which designate southern Gaston County as an area targeted for more suburban development" and the "area surrounding the proposed project is slated for suburban development" appear to be

provided as a rationalization for sprawl and justification for impacting farmlands, including designated Voluntary Agricultural District (VAD) properties. These projections do not appear to be consistent with the finding and future development trends identified in the Indirect and Cumulative Effects section. All NCDOT EISs reviewed by EPA in the last ten years or more contain a summary table of key impacts at the end of Chapter 1. The Gaston East-West Connector FEIS does not contain a summary table but gives much greater narrative discussions that often reiterate what was already addressed in the DEIS or frequently refer the reader back to the DEIS. Direct impacts to key human and natural resource impacts for DSA 9 need to be gleaned from numerous pages of written text in the FEIS. See also <http://ceq.hss.doe.gov/nepa/regs/ceq/1500.htm#1500.4>.

The NCTA is now part of the NCDOT which utilizes the NEPA/Section 404 Merger process. From EPA's understanding, NCTA has been requested by both FHWA and the USACE to utilize the Merger process for turnpike projects. The NCTA, with the exception of the Gaston East-West Connector, utilizes the 'Section 6002 TEAC' process for its proposed turnpike projects. NCDOT and other participating agencies refer to interagency coordination meetings as 'Merger concurrence meetings'. The FEIS on page 1-42 under Terrestrial Wildlife refers to a 'TEAC meeting' held on April 8, 2008. Similarly, the FEIS on page 1-35 refers to 'TEAC meetings' conducted on February 5, March 4, and again April 8, 2008. From EPA's understanding these were Merger team meetings. EPA is unaware of a TEAC plan that was provided by NCTA for this NEPA/Section 404 Merger project. More importantly, the tentative commitment with NCWRC, USFWS and EPA for providing wildlife passages to address habitat fragmentation issues during final design is not included on Table PC-1, Special Project Commitments. The cost of additional wildlife passages can be substantial. The comment on page 1-43 concerning the NCTA commitment for bridge design to be 'wildlife friendly', when feasible, is left technically undefined.

FEIS Responses to EPA DEIS Comments

Comment #2: Regarding EPA's past concurrences during the NEPA/Section 404 Merger process, EPA refers NCTA and FHWA to the 2005 Memorandum of Understanding (MOU) under Applicability, Section B and Concept of Concurrence. EPA is both a regulatory or resource agency depending upon the specific statute. Prior to the issuance of the DEIS, the regulatory issues associated with the revocation of the N.C. State Implementation Plan (SIP) were generally unknown to NCTA, FHWA and the EPA Merger project team member. Regarding Clean Water Act requirements and the substantial impacts to jurisdictions waters of the U.S., EPA requested information on a conceptual mitigation plan prior to the issuance of the DEIS. The DEIS did not contain a conceptual mitigation plan for the unavoidable impacts to jurisdictional streams and wetlands, including potentially 48,995 linear feet of streams. Miles of these impacted streams were included on the Section 303(d) list of impaired waters.

EPA believes that there is a significant difference between the Merger team process and the Section 6002 'TEAC process'. The Merger team process includes a defined MOU, distinct agency roles and responsibilities, a dispute resolution and

elevation process, a glossary of terms and environmental statutes, and very detailed steps and milestones to reach concurrence points. More importantly, the Merger process was developed as a collaborative, problem-solving team process with the permitting and participating agencies. The Section 6002 TEAC process is primarily based on the coordination plan and the concept of agencies 'raising objections' within 30 days of a NCTA proposal. This difference is evident for the Gaston East-West Connector project as most of the meetings were not truly conducted and held as typical Merger concurrence point meetings but as Section 6002 TEAC meetings. Under the Section 6002 TEAC process, written concurrence from other agencies except the USACE for the selection of the LEDPA is not requested nor required.

An example of the difference is evidenced by the changed nature of the proposed project. This new toll facility was initially advanced in 2001 by the NCDOT as a freeway under the Merger process. In 2005, it was then promoted as a candidate toll facility. However, it was still being described as a multi-lane, Strategic Highway Corridor (SHC) 'freeway' meant to divert traffic off of Interstate 85 and to facilitate truck traffic from/to the Charlotte Douglas Airport. Following the issuance of the DEIS, the transportation agencies are now describing this regional connector 'freeway' in the FEIS as a phased project with approximately half of the length build as two lanes with right of way for possibly more lanes in the future. EPA refers the transportation agencies to page 2 of the MOU (Concept of concurrence: *Examples of a reevaluation on concurrence might include a change in the assumptions on which the project purpose and need was based*). The need to construct a multi-lane freeway facility west of US 321 to I-85 is a potential change to the original assumptions on the purpose and need for the project. EPA was not contacted by NCTA or FHWA between the DEIS and FEIS for a discussion as to whether a reevaluation of concurrence was potentially needed by proposing to build just two lanes initially for approximately half the project length.

Regarding Responses to EPA's comments on the DEIS, some of the NCTA and FHWA responses included from pages B1-46 to B1-63 are not fully responsive or defer to the DEIS information. The responses to EPA's comments #27, # 28 and #29 on Mobile Source Air Toxics (MSATs) are not considered by EPA to be fully responsive. NCTA and FHWA continue to rely on interim guidance and updated interim guidance. The statement on page B1-58, "*Monitoring of MSAT emissions remains problematic for federally funded highway projects, and FHWA has only agreed to monitoring in a very limited way on past projects*", does not disclose the technical rationale for monitoring on past selected projects. The MSAT information contained in Appendix D does provide a further rationale why FHWA does not conduct quantitative MSAT analyses. The closing statement in this appendix states: "*Consequently, the results of such assessments would not be useful to decision-makers, who would need to weigh this information against project benefits, such as reducing traffic congestion, accident rates, and fatalities plus improved access for emergency response, that are better suited for quantitative analysis.*" The project's purpose and need does not include documentation of problems with accident rates, safety, or the need for improved access for emergency response on existing I-85 or parallel routes between Gastonia and Charlotte. Furthermore, based upon the Travel Demand Model for the design year, the level of service (LOS) is actually

worse on I-85 with the proposed Gaston East-West Connector than without. Building 21.9 mile, new multi-lane facility will not provide the ‘benefits’ identified in this statement. Considering the location of this project and its rural and suburban setting, and that overall air quality is already compromised from ozone and 2.5 microns of particulate matter (PM2.5), EPA’s request to perform a more robust analysis of MSATs, especially with respect to near roadway sensitive receptors, is not inconsistent with current FHWA interim guidance.

FEIS Environmental Commitments

Under Special Project Commitments (“Green Sheets”), EPA does not understand Items 1, 5, and 7, including Community Resources and Services (sharing information with Regional public schools), Community Safety (bridge over the Catawba River and future design accommodations for pedestrian/bicycle) , and Farmland (NCTA will work with Gaston County regarding public hearings related to land condemnation proceedings against the VAD parcels prior to right of way acquisition). The environmental commitment made to FWS, NCWRC and EPA concerning adequate wildlife passage where there is substantial habitat fragmentation is not included in Table PC-1. There is no reference to an environmental commitment to continue to work with impacted Environmental Justice neighborhoods and communities. There is no reference to continue coordination efforts with the EEP and permitting agencies to obtain acceptable compensatory mitigation for direct impacts to jurisdictional streams and wetlands. Item #18, Water Resources, developing a soil erosion and sedimentation plan and working with permitting agencies on BMPs does not include an specific environmental commitments.

Direct Impacts to Streams and Wetlands

EPA continues to have environmental concerns for the magnitude of impacts to jurisdictional streams and wetlands resulting from the preferred alternative (and Least Environmentally Damaging Preferred Alternative – LEDPA). EPA’s representative to the Merger team abstained from concurrence on the LEDPA. Recognizing the efforts to provide design refinements to the Preferred Alternative DSA 9, the direct impacts to jurisdictional streams for a 21.9-mile facility are one of the highest in the past ten years of the NEPA/Section 404 Merger process. DSA 9 currently includes 36,416 linear feet of total impact to streams (approximately 6.9 miles), 7.02 acres of impact to wetlands, 4.5 acres of impacts to ponds, and 91 individual stream crossings.

The FEIS states on page 1-43 that EPA also participates in the permitting process concerning waters of the U.S. and jurisdictional issues. Under Section 404(h)(1) of the Clean Water Act, the U.S. Fish and Wildlife Service also directly participates in the permitting process through its direct authorities under the Fish and Wildlife Coordination Act of 1934. The NEPA/Section 404 Merger 01 Guidance manual includes a glossary of laws related to the process that could be helpful to the NCTA and FHWA in identifying the agencies that have a participating role in the permitting processes (See also <http://water.epa.gov/lawsregs/guidance/wetlands/sec404.cfm>).

EPA recognizes that avoidance and minimization measures were addressed by NCTA and FHWA during Merger Concurrence Point 4A. Even with avoidance and minimization measures accepted by the Merger team agencies, the 36,416 linear feet of total stream impact is the single largest project impact since the inception of the NEPA/Section 404 Merger process. For this reason and the general lack of mitigation opportunities in the watersheds around Charlotte for Piedmont streams, EPA staff began requesting a Conceptual Mitigation Plan several years before the issuance of the DEIS.

Conceptual Mitigation Plan

The NCTA's Conceptual Mitigation Plan dated June 29, 2010, was included as a referenced document in the FEIS. A generalized summary is included in Section 2.5.4.4 and page 1-43 of the FEIS. Sections 1.0 to 6.0 contain background information and the general information that was presented at the multi-agency meeting on March 16, 2010. Appendix A of the report includes impacts to jurisdictional resources and Appendix C provides a project atlas for potential on-site, adjacent and nearby mitigation opportunities.

Based upon the assessment provided in the report, EPA concurs that the three (3) potential mitigation sites (Sites 1, 2 and 3) comprising seven (7) parcels are viable opportunities for compensatory mitigation. EPA also generally concurs that there is potential opportunity for some stream mitigation credit at the existing Beaverdam Creek mitigation site which is located in Mecklenburg County southwest of the future interchange connection at I-485. However, of the 14.0 Wetland Mitigation Units (WMUs) and 58,066 Stream Mitigation Units (SMUs) of perennial streams, 4,039 SMUs for intermittent important streams and 1,672 SMUs for intermittent unimportant streams required for DSA 9, a majority of the impacts are located in southern Gaston County and Catawba 01 (HUC 03050101). All of the Environmental Enhancement Program (EEP) assets shown in Exhibit 1, Page 8 of the report with the exception of the Beaverdam Creek mitigation site are located substantially far from the Catawba 01 and in other counties. According to NCDWQ representatives, these EEP assets may also be functionally different kinds of streams than those being impacted in the project study area. Based upon EPA's estimation, some of these EEP asset sites are located more than forty (40) miles from the project study area.

Regarding the potential storm water control locations and opportunities for mitigation credits, EPA does not concur that these locations and possible activities shown in Table 8, page 20 of the report should be for direct Section 404 mitigation credits. Due to the existing degraded conditions of several main water courses in the project study area, including Abernathy Creek, Crowder's Creek and Catawba Creek (per the Final 2006 303(d) list), and the projected Indirect and Cumulative Effects (ICE) from development resulting from the project, these protective measures from increased stormwater should be investigated and made regardless of potential mitigation credits. Of the 6 BMP sites listed on page 20 of the report, no existing stormwater controls are present at two of the sites (i.e., #1 and #6). Regarding BMP site #3, EPA cannot identify

from the description provided what the existing stormwater control is. The stormwater flow off the roof and parking lot is directed into an outflow pipe along the property line ending at a headwater stream. Mitigation credit (SMUs) for stormwater controls and BMPS should be considered as additional protective measures and environmental enhancements to prevent further degradation to impaired waters being directly and indirectly affected by the proposed project. As stated in the March 16, 2010, meeting minutes, it is NCTA and FHWA policy not to mitigate for indirect and cumulative effects from their proposed projects. EPA believes that these stormwater initiatives and BMPs should be instituted as enhancements under Section 401 requirements.

Of the 43 sites where there is potential on-site, adjacent and nearby mitigation opportunities included in Appendix C of the report, only three (3) stream sites have been identified as having potential for more than preservation credits (i.e., Restoration potential). EPA prefers restoration and enhancement activities to strict preservation for compensatory mitigation credit. Preservation (43 out of 43 identified sites) of these stream sites could very possibly end up being a 'patchwork' of mitigation sites that do little to protect or enhance the watershed's overall quality.

With the exception of the Beaverdam Creek mitigation site and the 3 on-site mitigation opportunities previously identified (Dockery, Harrison, and Falls properties shown in Table 5, page 13), EPA does not concur with the report conclusions that there has been adequately identified compensatory mitigation for jurisdictional impacts to streams. EPA will continue to address this outstanding issue of the lack of adequate compensatory mitigation of the project's impacts through the USACE's Section 404 permitting process.

Direct Impacts to the Human Environment

The Preferred Alternative DSA 9 includes 344 residential relocations, 38 businesses, 1 farm, and 3 non-profit facilities. The proposed Monroe Bypass/Connector toll facility located on the other side of Charlotte which is also approximately 20 miles in length with numerous interchanges has 107 residential relocations. The Gaston East-West Connector has a magnitude (3 times) or more residential relocations than a similarly designed toll facility. Table 1-3 of the FEIS indicates that 25 neighborhoods and rural communities will be impacted by DSA 9.

Regarding Environmental Justice issues, EPA's comments on the DEIS remain unaddressed in the FEIS. EPA considers that the construction of a toll facility in areas where there are many block groups characterized as minority and low-income is a potential environmental justice issue that could be expected to have a disproportionately high and adverse impact. The FEIS did not provide further analysis to this issue but defers to its comments and determination in Section 3.2.5 of the DEIS. The discussion included in this section of the DEIS was and remains inadequate for the purposes of identifying or quantifying the actual direct impacts of the new toll road to minority or low-income populations.

Table 3-7 of the DEIS is titled “General Environmental Justice Evaluation for Toll Facility”. This table contains mostly unsupported opinions and lacks a quantifiable analysis. The comment that, “*All commuters, including low-income commuters, would have the option to use a non-toll alternative route, such as I-85*”, is contrary to the claimed ‘benefits’ that the public will obtain as a result of the new, uncongested route to Charlotte. Further statements in this section of the DEIS are also based upon opinions and not factual data and analysis (e.g., Page 3-27; *Neighborhoods in the Project Study Area could contain special groups, particularly low-income and minority populations*; and, *All DSAs would also directly mobile home parks, which could represent low-income populations*). Of the 344 residential relocations for DSA 9, Table 3-2 indicates that 97 are minorities. Of the 344 residential relocations for DSA 9, Table 3-3 indicates as many as 88 households are below the poverty level and represent ‘low-income’. The evaluation of this data with respect to the project study area, the County or other defined population areas is not made in a comparative fashion. The ‘raw demographic data’ provided in these tables is not explored or fully discussed in Section 3.2.5 under Environmental Justice. The FEIS (or DEIS) did not include the potential thresholds for determining if the impacts were disproportionately high compared to area demographic data. EPA notes the response on page B1-59 of the FEIS concerning 21% of the Demographic Study Area being comprised of minorities and that DSA 9 has 28% of the 344 residential relocations. There is no specific reference to low-income population relocations in this response and how combined with minority populations this compares to demographic study data.

Of the 245 noise impacted receptors identified in Table 4.4 for DSA 9, there is no discussion as to how many of these impacted receptors are minority or low-income. Highway noise is also potentially a direct impact to low-income and minority populations.

EPA continues to maintain its concerns for the lack of a comprehensive, objective, and detailed Environmental Justice analysis for the proposed project. EPA requests that a more comprehensive and detailed Environmental Justice analysis be performed using updated U.S. Census data for the proposed project and that it be included in the supplemental information.

Other Project Direct Impacts and ICE

EPA continues to have environmental concerns regarding the impacts to farmlands including 146 acres of conversion from active agricultural lands and 1,084 acres of prime and important farmland soils (Table 1-5 of the FEIS). EPA is concerned about the loss of terrestrial forests (882 acres) and other greenspace (681 acres).

EPA continues to have environmental concerns regarding ICE. Table 1-8 of the FEIS includes the summary of potential for ICE by county. For DSA 9, the potential for accelerated growth and other indirect effects as a result of the project are characterized by NCTA and FHWA as “high”. The proposed Gaston East-West Connector is expected to increase sprawl in the project study area and beyond, including parts of York County,

S.C. (Page 1-49). EPA requests a copy of the ICE Quantitative Analysis report when it becomes available.